

REMARKS

This application is amended in a manner to place it in condition for allowance.

Status of the Claims

Claim 1 is amended to include some of the range recited in claim 2 and the features of claim 7. Support for the amendment can be found, for example, at paragraph [0065] of the present specification.

Accordingly claims 2 and 7, as well as claim 5, which depended from claim 2, are cancelled

Claims 1, 3, 4, 6 and 8 remain pending.

Claim Interpretation

Responsive to this section of the Official Action, claim 1 has been amended to recite a range of molecular weights.

Claim Objection

The Official Action objected to "at at least one site" previously recited in claim 1 and suggested amending to "at least one site". However, it is believed that this would render the feature unclear, so the claim has been amended as "formed from at least one site". The recited feature describes that an Si-O-Si bridge structure is formed at one or more sites thereof.

Withdrawal of the objection is respectfully requested.

Claim Rejections-35 USC §103

Claims 1-7 were rejected under 35 USC §103(a) as being unpatentable over YOUNG et al. US 2004/0198924 (YOUNG). This rejection is respectively traversed for the reasons that follow.

YOUNG was offered for teaching thermally polysiloxane compositions having an organopolysiloxane bearing vinyl groups, an organohydrogenpolysiloxane crosslinker and a platinum addition cure catalyst.

However, as is readily apparent from paragraph [0038] of YOUNG, YOUNG uses polysiloxane with a high phenyl group content in the pursuit of a high refractive index.

That is, in terms of the claimed invention, components (A) and (B) of YOUNG have a phenyl group content greater than that as recited in amended independent claim 1. The component (A) of YOUNG has a phenyl content of 50% to 90% by weight (see paragraph [0039]), and the component (B) of YOUNG has a phenyl content of 30% to 90% by weight (see paragraph [0059]). Thus, both phenyl contents are higher than the total aryl group and arylene group content of the claimed silicone containing polymers of "1% to 25% by weight".

One would have been forced to render the polysiloxane of YOUNG unsatisfactory for its intended use (i.e., a high refractive index) in order to even approach the claimed invention.

Therefore, YOUNG fails to render obvious the silicon of independent claim 1, and withdrawal of the rejection is respectfully requested.

Claims 1-6 and 8 were rejected under 35 USC §103(a) as being unpatentable over IKENO et al. US 2004/0028917 (IKENO).

Claim 7 was rejected under 35 USC §103(a) as being unpatentable over IKENO in view of a GELEST technical bulletin (GELEST).

These rejections are respectively traversed for the reasons that follow.

IKENO was offered for teaching curable organoopolysiloxane compositions comprising alkenyl-substituted polysiloxane, an organohydrogenpolysiloxane and an addition catalyst.

GELEST was offered for suggesting molecular weights as presently recited in amended claim 1.

While IKENO teaches that polysiloxane may contain a phenyl group, IKENO fails to teach the content of the phenyl group.

Moreover, there are no examples in IKENO that use polysiloxane containing a phenyl group.

Thus, IKENO fails to teach or suggest the total aryl group and arylene group content of the claimed silicone

containing polymers of "1% to 25% by weight" as recited in independent claim 1.

Regardless of the ability of GELEST to teach that for which it was offered, GELEST is unable to remedy the shortcomings of IKENO for reference purposes.

Therefore, IKENO fails to render obvious the claimed invention, and withdrawal of the rejection is respectfully requested.

Claims 1-8 were rejected under 35 USC §103(a) as being unpatentable over GARDNER et al. US 2003/0234458 (GARDNER). This rejection is respectively traversed for the reasons that follow.

GARDNER was offered for teaching a curable organoopolysiloxane composition comprising alkenyl-substituted polysiloxane, an organohydrogenpolysiloxane and an addition catalyst.

However, GARDNER discloses that the polysiloxane has a high phenyl group content used for the purpose of increasing a refractive index of a silicone core of an optical waveguide.

For example, when calculated based on the units and the mole ratio taught at paragraphs [0106] and [0108] of GARDNER, the polysiloxane containing a phenyl group used in Examples of GARDNER (both Resin B and Crosslinking Agent B) have a phenyl group content of greater than 40% by weight.

Thus, in order to even approach the claimed invention, i.e., the total aryl group and arylene group content being "1% to 25% by weight", would have rendered GARDNER unsatisfactory for the intended purpose of increasing a refractive index.

Therefore, GARDNER fails to render obvious the claimed invention, and withdrawal of the rejection is respectfully requested.

Conclusion

In view of the above remarks, none of the cited references teaches or suggests a silicone containing polymer having a total aryl group and arylene group content of 1% to 25% by weight, and the advantageous effects attained by this feature.

As is apparent by the disclosures at paragraphs [0064] and [0065], and Table 2 of the present specification, the claimed invention is able to exhibit both excellent heat resistance and handling properties by using a specific silicone containing polymer that has a total aryl group and arylene group content of 1% to 25% by weight.

Therefore, this application is in condition for allowance at the time of the next Official Action. Allowance and passage to issue on that basis is respectfully requested.

Should there be any matters that need to be resolved in the present application, the Examiner is respectfully requested to contact the undersigned at the telephone number listed below.

The Commissioner is hereby authorized in this, concurrent, and future submissions, to charge any deficiency or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

YOUNG & THOMPSON

/Robert A. Madsen/
Robert A. Madsen, Reg. No. 58,543
209 Madison Street, Suite 500
Alexandria, VA 22314
Telephone (703) 521-2297
Telefax (703) 685-0573
(703) 979-4709

RAM/lrs